

WHAT IS CLAIMED IS:

1. A film-forming cosmetic composition comprising:

- particles of at least one polymer in an aqueous dispersion, wherein said at least one polymer has a glass transition temperature (T_g) ranging from 35°C to 80°C and a minimum film-forming temperature (MFT) such that $T_g - \text{MFT} \geq 8^\circ\text{C}$; and
- at least two organic solvents wherein:
 - a first organic solvent has a molecular weight less than or equal to 200 and a boiling point, measured at ambient pressure, ranging from 100°C and 300°C, and
 - a second organic solvent has a molecular weight greater than 200 and a boiling point, measured at ambient pressure, greater than or equal to 120°C.

2. A film-forming cosmetic composition according to Claim 1, wherein said at least one polymer has a $T_g - \text{MFT} \geq 12^\circ\text{C}$.

3. A film-forming cosmetic composition according to Claim 1, wherein said at least one polymer has a $T_g - \text{MFT} \geq 16^\circ\text{C}$.

4. A film-forming cosmetic composition according to Claim 1, wherein said at least one polymer has a $T_g - \text{MFT} \geq 18^\circ\text{C}$.

5. A film-forming cosmetic composition according to Claim 1, wherein said at least one polymer has a $T_g - \text{MFT}$ ranging from 8°C to 25°C.

6. A film-forming cosmetic composition according to Claim 1, wherein said at least one polymer has a T_g ranging from 40°C to 65°C.

7. A film-forming cosmetic composition according to Claim 1, wherein said particles have a size ranging from 50 to 200 nm.

8. A film-forming cosmetic composition according to Claim 7, wherein said particles have a size ranging from 80 to 150 nm.

9. A film-forming cosmetic composition comprising: a film-forming composition comprising:

- at least one polymer in an aqueous dispersion, wherein said at least one polymer has a glass transition temperature (T_g) ranging from 35°C to 80°C and a minimum film-forming temperature (MFT) such that $T_g - \text{MFT} \geq 8^\circ\text{C}$; and
- at least two organic solvents wherein:

a first organic solvent has a molecular weight less than or equal to 200 and a boiling point, measured at ambient pressure, ranging from 100°C and 300°C, and

a second organic solvent has a molecular weight greater than 200 and a boiling point, measured at ambient pressure, greater than or equal to 120°C.

10. A film-forming cosmetic composition according to Claim 1, wherein said at least one polymer is formed by polymerization of at least one ethylenically unsaturated monomer chosen from (C₁-C₃₀) alkyl (meth)acrylates, vinyl esters, and aromatic vinylic monomers.

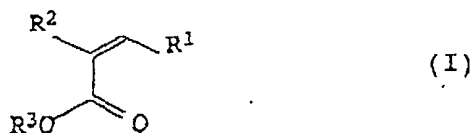
11. A film-forming cosmetic composition according to Claim 10, wherein said aromatic vinylic monomer is styrene.

12. A film-forming cosmetic composition according to Claim 11, wherein said at least one polymer is formed by polymerization of styrene with at least one monomer chosen from methyl methacrylate, n-butyl (meth)acrylate and tert-butyl (meth)acrylate.

13. A film-forming composition according to Claim 11, wherein said at least one polymer is formed by polymerization of styrene with at least one monomer chosen from acrylic acid, methacrylic acid, crotonic acid and itaconic acid.

14. A film-forming cosmetic composition according to Claim 1, wherein said at least one polymer is formed from styrene, at least one monomer chosen from methyl methacrylate, n-butyl (meth)acrylate, and tert-butyl (meth)acrylate, and at least one monomer chosen from acrylic acid, methacrylic acid, crotonic acid and itaconic acid.

15. A film-forming cosmetic composition according to Claim 1, wherein said at least one polymer is formed from at least 0.2% by weight, relative to the total weight of monomers forming said at least one polymer, of at least one monomer chosen from monomers of formula (I):



wherein R^1 and R^2 which may be identical or different, are each chosen from hydrogen and methyl groups, and R^3 is chosen from cyclic, linear, and branched (C_9 - C_{30}) alkyl groups.

16. A film-forming cosmetic composition according to Claim 15, wherein said monomers of formula (I) are present in said at least one polymer in an amount ranging from 0.2 to 50 % by weight relative to the total weight of monomers forming said at least one polymer.

17. A film-forming cosmetic composition according to Claim 16, wherein said monomers of formula (I) are present in said at least one polymer in an amount ranging from 0.6 to 25 % by weight relative to the total weight of monomers forming said at least one polymer.

18. A film-forming cosmetic composition according to Claim 17, wherein said monomers of formula (I) are present in said at least one polymer in an amount ranging from 3 to 25 % by weight relative to the total weight of monomers forming said at least one polymer.

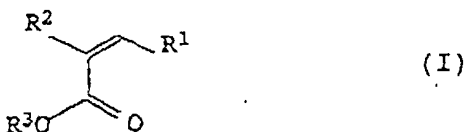
19. A film-forming cosmetic composition according to Claim 15, wherein R^3 is chosen from cyclic, linear, and branched (C_{12} - C_{22})alkyl groups.

20. A film-forming cosmetic composition according to Claim 15, wherein R^3 is chosen from linear (C_9 - C_{30})alkyl groups.

21. A film-forming cosmetic composition according to Claim 15, wherein said monomers of formula (I) are chosen from esters of (meth)acrylic acid and (C_{12} - C_{22}) alcohols, esters of methacrylic acid and (C_{12} - C_{22}) alcohols, and esters of crotonic acid and (C_{12} - C_{22}) alcohols.

22. A film-forming cosmetic composition according to Claim 21, wherein said esters of (meth)acrylic acid and (C₁₂-C₂₂) alcohols are chosen from lauryl (meth)acrylate and stearyl (meth)acrylate.

23. A film-forming cosmetic composition according to Claim 1, wherein said at least one polymer is formed from styrene and at least one monomer of formula (I):



wherein R¹ and R² which may be identical or different, are each chosen from hydrogen and methyl groups, and R³ is chosen from cyclic, linear, and branched (C₉-C₃₀) alkyl groups.

24. A film-forming cosmetic composition according to Claim 23, wherein the proportion of styrene and said at least one monomer of formula (I) forming said at least one polymer ranges from 15 to 80% by weight relative to the total weight of monomer forming said at least one polymer.

25. A film-forming cosmetic composition according to Claim 24, wherein the proportion of styrene and said at least one monomer of formula (I) forming said at least one polymer ranges from 30 to 60% by weight relative to the total weight of monomer forming said at least one polymer.

26. A film-forming cosmetic composition according to Claim 1, wherein said particles of at least one polymer are particles comprising at least two polymer domains.

27. A film-forming cosmetic composition according to Claim 26, wherein said at least one polymer comprises:

a) a first polymer formed from at least one monomer chosen from:

i) at least one monomer (i) comprising at least one group chosen from ionic groups and ion-forming groups, wherein said at least one monomer (i) is present in an amount ranging from 5 to 50 parts by weight relative to the total weight of monomer forming said first polymer, and

ii) at least one neutral monomer (ii), wherein said neutral monomer (ii) is present in an amount ranging from 50 to 95 parts by weight relative to the total weight of monomer forming said first polymer, and

b) a second polymer formed from at least one neutral monomer.

28. A film-forming cosmetic composition according to Claim 27, wherein said monomer (i) is chosen from anionic monomers, cationic monomers, and amphoteric monomers.

29. A film-forming cosmetic composition according to Claim 28, wherein said anionic monomers are chosen from ethylenically unsaturated monocarboxylic acids, ethylenically unsaturated dicarboxylic acids, and ethylenically unsaturated monomers comprising at least one group chosen from a sulfonic acid group, a phosphonic acid group and a phosphoric acid group.

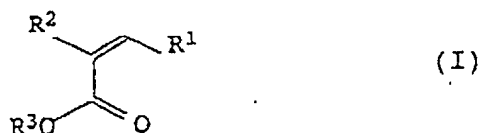
30. A film-forming cosmetic composition according to Claim 29, wherein said ethylenically unsaturated monocarboxylic acids are chosen from acrylic acid, methacrylic acid and crotonic acid.

31. A film-forming cosmetic composition according to Claim 28, wherein said cationic monomers are chosen from esters of (meth)acrylic acid, amides of amino alcohols, diamines chosen from dialkylaminoalkyl (meth)acrylates and dialkylaminoalkyl (meth)acrylamides, dialkylaminostyrenes, and vinylpyridines.

32. A film-forming cosmetic composition according to Claim 28, wherein said amphoteric monomers are chosen from N-(3-sulphopropyl)-N-methacryloyloxyethyl-N,N-dimethyl-ammonium-betaine and N-carboxymethyl-N-methacryloyloxyethyl-N,N-dimethyl-ammonium-betaine.

33. A film-forming cosmetic composition according to Claim 27, wherein said neutral monomers are chosen from:

- monomers of formula (I):



wherein R¹ and R² which may be identical or different, are each chosen from hydrogen and methyl groups, and R³ is chosen from cyclic, linear, and branched (C₉-C₃₀) alkyl groups.

34. A film-forming cosmetic composition according to Claim 27, wherein said at least one polymer is further formed from neutral monomers chosen from (C₁-C₈)alkyl (meth)acrylates, vinyl esters of (C₁-C₁₈)carboxylic acids, aromatic vinylic monomers, and aliphatic olefins having from 2 to 8 carbon atoms and one to two ethylenically unsaturated double bonds.

35. A film-forming cosmetic composition according to Claim 34, wherein said neutral monomers are chosen from styrene, methyl methacrylate, n-butyl (meth)acrylate, tert-butyl (meth)acrylate and isobutyl (meth)acrylate.

36. A film-forming cosmetic composition according to Claim 27, wherein said at least one polymer is further formed from neutral comonomers chosen from monomers containing hydroxyl groups, optionally substituted amides of ethylenically unsaturated monocarboxylic acids, optionally substituted amides of ethylenically unsaturated dicarboxylic acids, nitrile monomers and vinyl halide monomers.

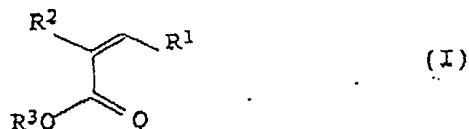
37. A film-forming cosmetic composition according to Claim 27, wherein said first polymer is formed with a monomer (i) having at least one group chosen from wholly and partially neutralized ionic groups.

38. A film-forming cosmetic composition according to Claim 27, wherein said at least one polymer is formed from:

-- a first polymer formed from:

- (a) at least one monomer (i) comprising at least one group chosen from ionic groups and ion-forming groups, wherein said at least one monomer (i) is present in an amount ranging from 5 to 40 parts by weight relative to the total weight of monomer forming said first polymer,

- (b) at least one monomer chosen from monomers of formula (I):



wherein R^1 and R^2 which may be identical or different, are each chosen from hydrogen and methyl groups, and R^3 is chosen from cyclic, linear, and branched ($\text{C}_9\text{-C}_{30}$) alkyl groups, wherein said at least one monomer chosen from monomers of formula (I) is present in an amount ranging from 2 to 50 parts by weight relative to the total weight of monomer forming said first polymer,

- (c) at least one neutral monomer (ii) chosen from ($\text{C}_1\text{-C}_8$)alkyl (meth)acrylates, vinyl esters of ($\text{C}_1\text{-C}_{18}$) carboxylic acids, and aromatic vinylic monomers, wherein said at least one neutral monomer (ii) is present in an amount ranging from 10 to 93 parts by weight relative to the total weight of monomer forming said first polymer, and
- (d) at least one additional monomer (d) differing from said at least one monomer (i), said at least one neutral monomer (ii) and said at least one monomer chosen from the monomers of formula (I), wherein said at least one monomer (d) is present in an amount ranging from 0 to 40 parts by weight relative to the total weight of monomer forming said first polymer, and

a second polymer formed from:

- (e) at least one neutral monomer (e) chosen from (C₁-C₈) alkyl (meth)acrylates, vinyl esters of (C₁-C₁₈) carboxylic acids, aromatic vinylic monomers, wherein said at least one monomer (e) is present in an amount ranging from 60 to 100 parts by weight relative to the total weight of monomer forming said second polymer, and
- (f) at least one monomer (f) differing from said at least one neutral monomer (e), wherein said at least one monomer (f) is present in an amount ranging from 0 to 40 parts by weight relative to the total weight of monomer forming said second polymer.

39. A film-forming cosmetic composition according to Claim 38, wherein said at least one monomer of formula (I) is present in an amount ranging from 10 to 30 parts by weight relative to the total weight of monomer forming said first polymer.

40. A film-forming cosmetic composition according to Claim 38, wherein said at least one neutral monomer (ii) is present in an amount ranging from 40 to 85 parts by weight relative to the total weight of monomer forming said first polymer.

41. A film-forming cosmetic composition according to Claim 27, wherein the weight ratio of the first polymer to the second polymer ranges from 10:90 to 60:40.

42. A film-forming cosmetic composition according to Claim 41, wherein the weight ratio of the first polymer to the second polymer ranges from 30:70 to 50:50.

43. A film-forming cosmetic composition according to Claim 1, wherein said at least one polymer is present in an amount ranging from 0.1% to 60% by weight relative to the total weight of the composition.

44. A film-forming cosmetic composition according to Claim 1, wherein said at least one polymer is present in an amount ranging from 1% to 50% by weight relative to the total weight of the composition.

45. A film-forming cosmetic composition according to Claim 1, wherein said at least one polymer is present in an amount ranging from 5% to 40% by weight relative to the total weight of the composition.

46. A film-forming cosmetic composition according to Claim 1, wherein said first organic solvent has a boiling point ranging from 120°C to 250°C.

47. A film-forming cosmetic composition according to Claim 1, wherein said first organic solvent has a boiling point ranging from 130°C to 230°C.

48. A film-forming cosmetic composition according to Claim 1, wherein said first organic solvent is chosen from ethers of propylene glycol, ethers of dipropylene glycol, and compounds chosen from propylene glycol methyl ether acetate, propylene glycol diacetate, methyl lactate, ethyl lactate, isopropyl lactate and butyl lactate.

49. A film-forming cosmetic composition according to Claim 48, wherein said ethers of propylene glycol are chosen from propylene glycol n-butyl ether, propylene glycol t-butyl ether, propylene glycol n-propyl ether, and propylene glycol phenyl ether, and said ethers of dipropylene glycol are chosen from dipropylene glycol n-butyl ether, dipropylene glycol methyl ether, dipropylene glycol t-butyl ether, and dipropylene glycol n-propyl ether.

50. A film-forming cosmetic composition according to Claim 1, wherein said first organic solvent is present in an amount ranging from 0.05% to 10% by weight relative to the total weight of the composition.

51. A film-forming cosmetic composition according to Claim 50, wherein said first organic solvent is present in an amount ranging from 0.1% to 8% by weight relative to the total weight of the composition.

52. A film-forming cosmetic composition according to Claim 1, wherein said second organic solvent has a boiling point greater than or equal to 140°C.

53. A film-forming cosmetic composition according to Claim 1, wherein said second organic solvent has a boiling point greater than or equal to 160°C.

54. A film-forming cosmetic composition according to Claim 1, wherein said second organic solvent has a boiling point ranging from 140 to 500°C.

55. A film-forming cosmetic composition according to Claim 1, wherein said second organic solvent is chosen from adipates, sebacates, citrates, and phthalates.

56. A film-forming cosmetic composition according to Claim 55, wherein said second organic solvent is chosen from diethyl adipate, dibutyl adipate, diisobutyl adipate, diisopropyl adipate, dimethyl sebacate, diethyl sebacate, dibutyl sebacate, triethyl citrate, acetyltriethyl citrate, acetyltributyl citrate, diethyl phthalate, dibutyl phthalate and dioctyl phthalate.

57. A film-forming cosmetic composition according to Claim 1, wherein said second organic solvent is present in an amount ranging from 0.05% to 20% by weight relative to the total weight of the composition.

58. A film-forming cosmetic composition according to Claim 57, wherein said second organic solvent is present in an amount ranging from 0.1% to 10% by weight relative to the total weight of the composition.

59. A film-forming cosmetic composition according to Claim 1 further comprising at least one coloring material chosen from water-soluble colorants and powder coloring materials.

60. A film-forming cosmetic composition according to Claim 59, wherein said powder coloring materials are chosen from pigments, nacreous pigments and flakes.

61. A film-forming cosmetic composition according to Claim 59, wherein said at least one coloring material is present in an amount ranging from 0.01% to 50% by weight relative to the total weight of the composition.

62. A film-forming cosmetic composition according to Claim 61, wherein said at least one coloring material is present in an amount ranging from 0.01% to 30% by weight relative to the total weight of the composition.

63. A film-forming cosmetic composition according to Claim 1 further comprising at least one thickening agent.

64. A film-forming cosmetic composition according to Claim 63, wherein said at one least thickening agent is chosen from clays swelling in water, aggregating thickeners, and water-soluble cellulosic thickeners.

65. A film-forming cosmetic composition according to Claim 64, wherein said at least one thickening agent is present in an amount ranging from 0.1% to 5% by weight relative to the total weight of the composition.

66. A film-forming cosmetic composition according to Claim 1 further comprising at least one cosmetic additive.

67. A film-forming cosmetic composition according to Claim 66, wherein said at least one cosmetic additive is chosen from fillers, spreading agents, wetting agents, dispersants, anti-foam agents, preservatives, UV filters, active agents, surfactants, hydrating agents, perfumes, neutralizing agents, stabilizers and antioxidants.

68. A film-forming cosmetic composition according to Claim 1 further comprising at least one compound chosen from emulsifiers and protective colloid agents.

69. A film-forming cosmetic composition according to Claim 1, wherein said film-forming cosmetic composition is a making-up or cosmetic care composition for a keratinic material.

70. A film-forming cosmetic composition comprising:

- particles of at least one polymer in an aqueous dispersion, wherein said at least one polymer has a glass transition temperature (T_g) ranging from 35°C to 80°C and a minimum film-forming temperature (MFT) such that $T_g - \text{MFT} \geq 8^\circ\text{C}$; and
 - at least two organic solvents wherein:
 - a first organic solvent has a molecular weight less than or equal to 200 and a boiling point, measured at ambient pressure, ranging from 100°C and 300°C, and
 - a second organic solvent has a molecular weight greater than 200 and a boiling point, measured at ambient pressure, greater than or equal to 120°C,
- wherein said film-forming cosmetic composition is a nail varnish.

71. A method for making-up or care of a keratinic material comprising:

applying onto said keratinic material a film-forming cosmetic composition comprising:

- particles of at least one polymer in an aqueous dispersion, wherein said at least one polymer has a glass transition temperature (T_g) ranging from 35°C to 80°C and a minimum film-forming temperature (MFT) such that $T_g - \text{MFT} \geq 8^\circ\text{C}$; and

- at least two organic solvents, wherein:

a first organic solvent has a molecular weight less than or equal to 200 and a boiling point, measured at ambient pressure, ranging from 100°C and 300°C, and

a second organic solvent has a molecular weight greater than 200 and a boiling point, measured at ambient pressure, greater than or equal to 120°C.

72. A method for forming a film comprising applying to a keratinic material a film-forming composition comprising:

- at least one polymer in an aqueous dispersion, wherein said at least one polymer has a glass transition temperature (T_g) ranging from 35°C to 80°C and a minimum film-forming temperature (MFT) such that $T_g - \text{MFT} \geq 8^\circ\text{C}$; and
- at least two organic solvents wherein:

a first organic solvent has a molecular weight less than or equal to 200 and a boiling point, measured at ambient pressure, ranging from 100°C and 300°C, and a second organic solvent has a molecular weight greater than 200 and a boiling point, measured at ambient pressure, greater than or equal to 120°C,

wherein the film formed on the keratinic material has at least one of the following

properties: is removable with at least one compound chosen from acetone and ethyl acetate; adheres to the nail; and is glossy.

73. A method for forming a film comprising applying to a keratinic material a film-forming composition comprising:

- particles of at least one polymer in an aqueous dispersion, wherein said at least one polymer has a glass transition temperature (T_g) ranging from 35°C to 80°C and a minimum film-forming temperature (MFT) such that $T_g - \text{MFT} \geq 8^\circ\text{C}$; and
 - at least two organic solvents wherein:
 - a first organic solvent has a molecular weight less than or equal to 200 and a boiling point, measured at ambient pressure, ranging from 100°C and 300°C, and
 - a second organic solvent has a molecular weight greater than 200 and a boiling point, measured at ambient pressure, greater than or equal to 120°C,
- wherein the film formed on the keratinic material has at least one of the following properties: is removable with at least one compound chosen from acetone and ethyl acetate; adheres to the nail; and is glossy.

74. A method for making-up or care of a keratinic material according to claim 71, wherein said keratinic material is a human nail.

75. A method for forming a film according to claim 72, wherein said keratinic material is a human nail.

76. A method for forming a film according to claim 73, wherein said keratinic material is a human nail.